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The Masters are intended as an aid to teachers and are not a definitive course outline or summary. They represent the authors' interpretation and approach and are not endorsed by any governing body. They provide the individual teacher with the opportunity to mould them to suit their circumstances and thereby satisfy themselves that they have adequately met the requirements of their courses.

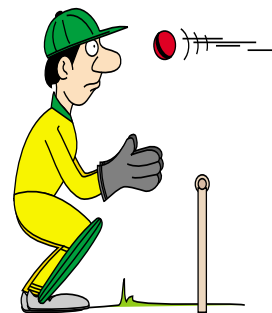
Any similarities to existing worksheets are coincidental.

Injuries that occur when participating in exercise or sport can occur as a result of trauma or overuse.

In general terms, sports injuries can be classified into three categories (direct, indirect, overuse) and unfortunately for athletes they are all too common due to the intense nature of training and competition.

DIRECT INJURIES :

1. Define “direct” sports injuries ?
2. List some sports in which direct injuries are common.
3. Give 3 sporting examples of direct sports injuries.
4. How can direct sports injuries be avoided or minimised ? Discuss.
5. How should a direct injury be treated at the scene ?
6. What are the rehabilitation procedures for direct injuries ?



INDIRECT INJURIES :

1. Define “indirect” sports injuries ?
2. List some sports in which indirect injuries are common.
3. Give 3 sporting examples of indirect sports injuries.
4. How can indirect sports injuries be avoided or minimised ? Discuss.
5. How should a indirect injury be treated at the scene ?
6. What are the rehabilitation procedures for indirect injuries ?



OVERUSE INJURIES :

1. Define “overuse” sports injuries ?
2. List some sports in which overuse injuries are common.
3. Give 3 sporting examples of overuse injury occurring as a result of training and competing in sport.
4. How can overuse sports injuries be avoided or minimised ? Discuss.
5. What is the immediate treatment for an overuse injury ?
6. What are the long term rehabilitation procedures for overuse injuries ?



Sports injuries can occur by accident or as a result of poor procedures.

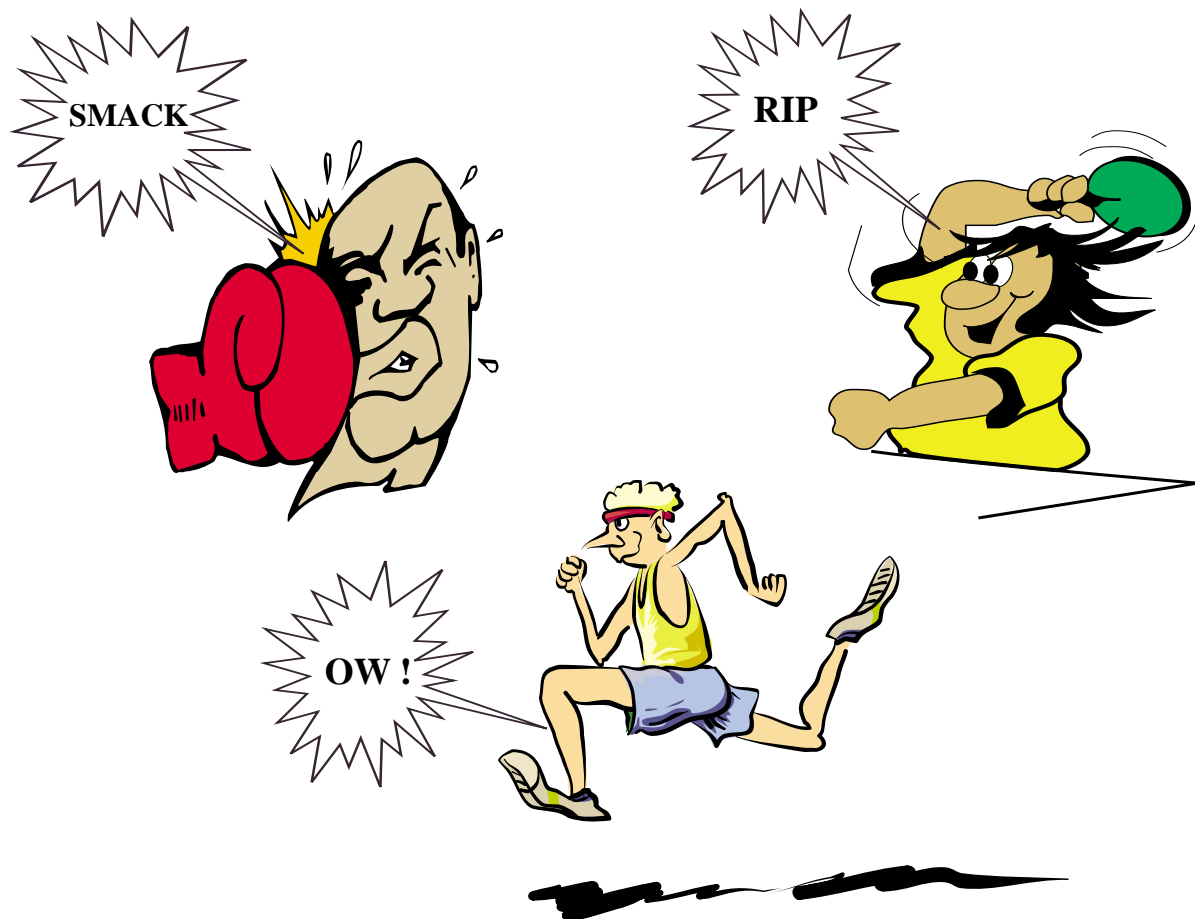
Regardless of the cause, however, it is important that correct first aid treatment procedures are followed by the individual or the medical staff at the sporting event.

Fill out the table to indicate the possible causes, signs & symptoms and first aid treatment for the sports injuries listed.

CAUSES	SIGNS & SYMPTOMS	TREATMENT
BLEEDING (open wound)		
BLISTERS		
BRUISING		
MUSCLE CRAMP		
STITCH		
DISLOCATION		
FRACTURE		
HEAD INJURY		
LIGAMENT SPRAIN		
MUSCLE STRAIN		
WINDING		

Sports injuries occur at both the recreational and the elite level and can be classified as DIRECT, INDIRECT and OVERUSE

It is important to understand the causes and signs & symptoms of common sports injuries and be able to provide immediate and long term treatment to ensure that players return to training and competition as quickly as is possible.



1. Identify the cause of each injury above.
2. List the signs and symptoms of each injury above.
3. Describe the immediate or first aid treatment for each injury above.
4. Outline the ongoing treatment procedures to ensure a quick return to training and competition.
5. When would each athlete be ready to resume

(a) training ?
(b) competition ?
6. Outlines the procedures that should be followed to minimise the risk of the re-injury.



Regardless of the precautions taken, injuries will occur in sport. It is vital that all clubs have a system of injury management that clearly defines areas of responsibility and standard procedures.

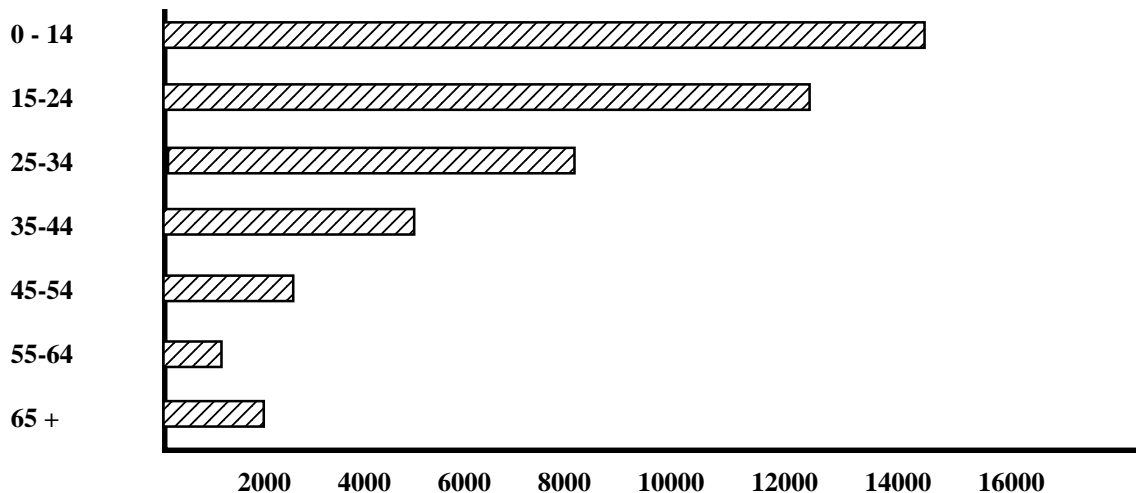
1. Outline the responsibility of the following in the injury management system:-
 - Club administration
 - Trainers
 - Coaches
2. Which individuals in the club should have first aid training? To what level should they be trained?
3. Describe what should happen in a player's injury management process once they have received first aid.
4. Identify the information that should be recorded by the trainer in relation to a player's injury.
5. Discuss the process which should be followed if the player is unable to be cleared from the injury at the first training session following the incident.
6. Who is responsible for clearing players from injury?
7. Describe the process that should be followed once the player is cleared from injury until they are able return to competition.



The Australian Bureau of Statistics 2002 - 2003 indicate that there were 6,653,772 hospitalisations of which 45,452 or 0.7% were sports and recreation related.

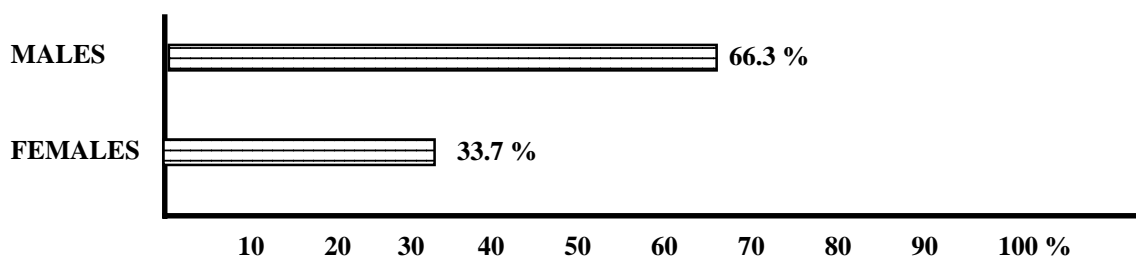
The following graphs represent the statistics related to sports injuries for the years 2002 - 2003.

HOSPITALISATION BY AGE GROUP :



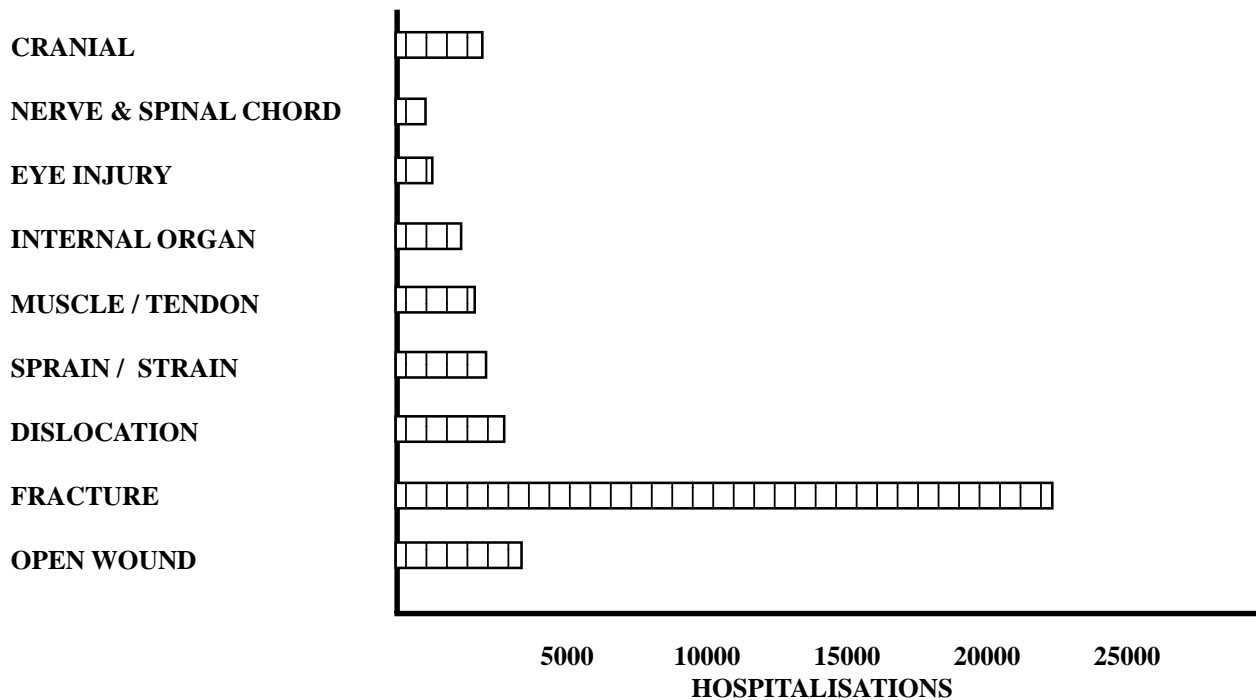
1. Which age group had the most incidence of hospitalisation for sports injuries ? Why do you think this is so ?
2. Which age group had the least incidence of hospitalisation for sports injuries ? Why do you think this is so ?

SPORTS INJURIES BY GENDER :



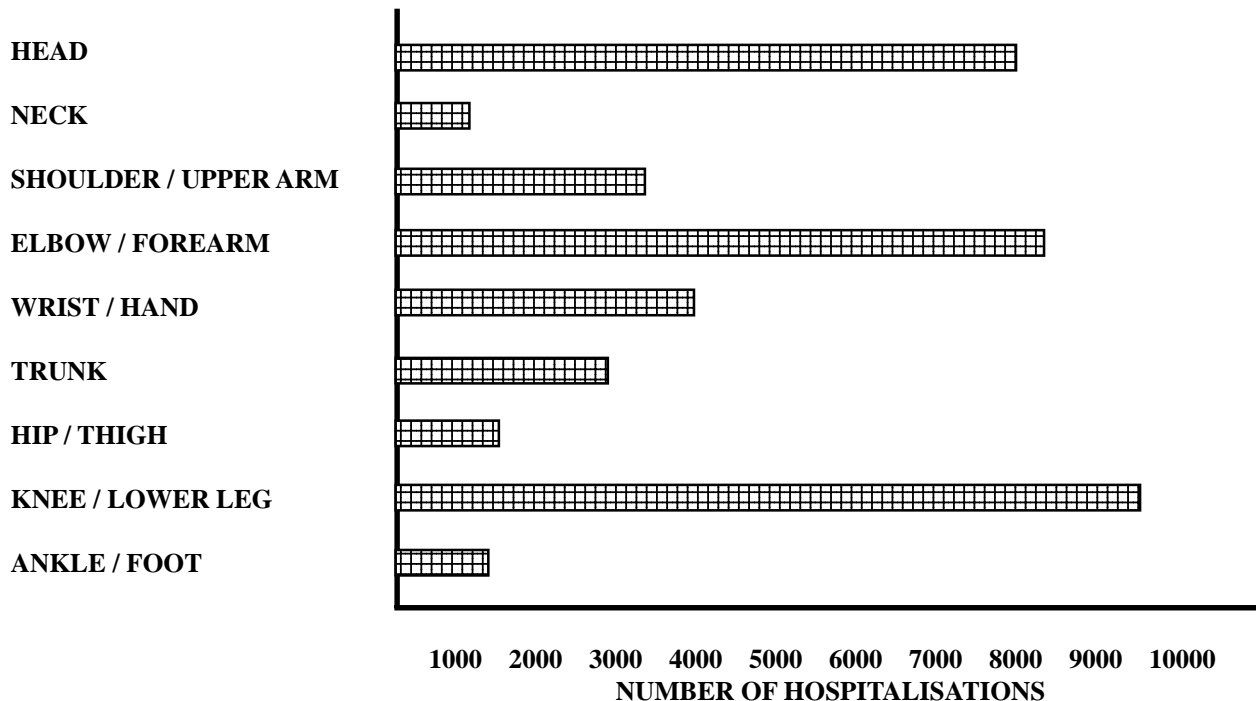
3. Why do you think males have a higher incidence of sports injuries ?
4. What could be done to reduce the numbers of males being injured when playing sport ?

THE NATURE OF SPORTING INJURIES :



5. Which type of injury required the most hospitalisations and why do you think this is the case ?
6. The Australian Bureau of Statistics found that only 10 % of sports injuries required hospitalisation. Which of the above injuries would be the most common that DO NOT require hospitalisation and why ?

INJURIES BY BODY PART :

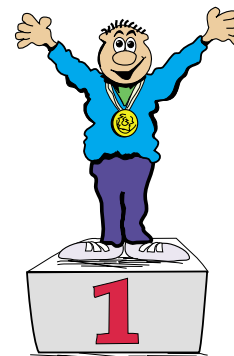


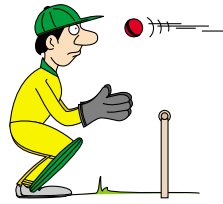
7. Which body part is most at risk of sports injury and why do you think this is the case ?
8. Explain some risk management strategies that could be used to reduce the chances of injury to this body part.

Medibank Private Health Insurance conducted some research in 2006.
Some of the findings from the Safe Sports Report 2006 were :

- * Australia's fittest state is the ACT (76.1 % of residents are regularly active)
- * South Australia is the least active (57.7 % of residents are regularly active)
- * Sports injuries cost the Australian community \$ 2 billion per year.
- * Sports injury rates peak in the winter months of May, June and July
- * The ten most injury prone sports are :
 - 1 - Australian Rules Football
 - 2 - Basketball
 - 3 - Netball
 - 4 - Running
 - 5 - Tennis
 - 6 - Cricket
 - 7 - Soccer
 - 8 - Aerobics
 - 9 - Rugby League
 - 10 - Rugby Union

9.
 - (a) Why do you think Aussie Rules Football topped the list above ?
 - (b) What can be done to reduce the risks of injury in Aussie Rules Football ?
10. Basketball and Netball are non-contact sports. Why are they so high on the list ? Discuss.
11. What do you think are the most common injuries from running and how can these be prevented ?
12. What do you think are the most common injuries from cricket and how can these be prevented ?
13. Why do you think Aerobics gives rise to a lot of sports injuries.
Discuss in terms of the types of people participating and the types of activities performed.
14. Why do you think there are more injuries in May, June and July ? Discuss.
15. For one of the sports listed in the top ten above, design a risk management plan for participation.
Discuss in terms of :
 - * physical preparation
 - * warm ups and cool downs
 - * facilities and equipment
 - * clothing and footwear
 - * protective equipment
 - * rules of competition and rule modifications
 - * preventative taping and bandaging
 - * etc...





Sports injuries occur in sport on a regular basis despite the best efforts of athletes, coaches and administrators to reduce the risks of their occurrence.

Direct injuries are usually caused by contact or collisions with opponents, sticks or balls and result in bruises, cuts and dislocations.

Indirect injuries such as torn muscles and strained ligaments result from unnatural muscle actions and extreme forces acting on joints.

Overuse injuries are related to repetitive or unaccustomed use of muscle, tendon or bone that may result in stress fractures or tendonitis.

Participate in a practical activity in order to recognise the types of injuries that may occur in the sporting environment. Activities such as cricket, hockey, soccer, aussie rules, basketball, etc. will be appropriate as they all involve some risk of injury and require careful risk assessment and management.

Discussion :

1. (a) Provide examples of the types and causes of “DIRECT” injuries that could occur from participation in this activity.

- (b) What precautions should be taken to prevent “DIRECT” injuries occurring in this activity ?

2. (a) Provide examples of the types and causes of “INDIRECT” injuries that could occur from participation in this activity.

- (b) What precautions should be taken to prevent “INDIRECT” injuries occurring in this activity and why ?

3. (a) Provide examples of the types and causes of “OVERUSE” injuries that could occur from prolonged participation in this activity.

- (b) What precautions should be taken to prevent “OVERUSE” injuries from participation in this activity ?

4. Discuss the aspects of this activity that are likely to lead to injuries occurring.

5. What rules have been or should be introduced in this sport to reduce the incidence of injury ? Discuss.

6. If a soft tissue injury occurred during this activity, describe the immediate procedures that should be followed.

7. What are the medium and long term treatments that should be administered to return an athlete to training and competition after a soft tissue injury ? Discuss.

Injuries sustained by athletes can be classified according to their nature and cause.

External violence or direct injuries are usually caused by contact or collisions with opponents, sticks or balls and result in haematoma (corks), dislocations and cuts.

Internal violence or indirect injuries such as torn muscles and strained ligaments result from unnatural muscle actions and extreme forces acting on joints.

Overuse injuries are related to repetitive or unaccustomed use of muscle, tendon or bone that may result in stress fractures or tendonitis.

Aim : To collect and analyse data on sporting injuries.

Procedure : Select a sport and collect data on injuries common to the sport.
Categorise the injuries according to direct, indirect, overuse.
Identify the causes of the injuries.

Data on injuries relating to popular sports appear in newspapers and on sporting association or club websites.

Data :

INJURY CLASSIFICATION	TYPE OF INJURY	CAUSE OF INJURY
DIRECT		
INDIRECT		
OVERUSE		

Discussion :

1. From the data collected, which category of injury appears to be the most commonly occurring in the sport ?
2. Describe how the nature of the sport influences the types and frequency of injuries.
3. Outline the precautions that could be taken by the clubs and players to minimise the occurrence of injuries in each category.
4. **FIRST AID :**
 - (a) Explain the “R I C E” procedure used in the first aid treatment of soft tissue injuries.
 - (b) Discuss the purpose of each component of this procedure in the treatment of soft tissue injury.
5. **REHABILITATION :**
 - (a) List and describe the range of medium and long term rehabilitation procedures that are available to treat the injuries identified
 - (b) At what point would athletes be ready to resume training and competition ? Explain.

